

**AMENDMENT**

Kindly amend the application without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents, as follows.

**IN THE CLAIMS:**

Kindly amend the claims, without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents, to read as follows:

1-25. (Cancelled)

26. (Previously Amended) A method of repairing recently damaged myocardium and/or myocardial cells comprising the administration of a cytokine to a patient in need thereof.

27. (Original) The method of claim 26, wherein the cytokine comprises a cytokine selected from the group consisting of:

- a. a stem cell factor;
- b. a granulocyte-colony stimulating factor;
- c. a stromal cell-derived factor-1;
- d. an interleukin-3;
- e. a granulocyte-macrophage colony stimulating factor;
- f. a macrophage colony stimulating factor;
- g. a steel factor;
- h. a vascular endothelial growth factor;

and combinations thereof.

28. (Original) The method of claim 27, wherein a therapeutically effective dose of a cytokine is administered.

29. (Original) The method of claim 28, wherein the therapeutically effective dose of the

cytokine is 50-500  $\mu\text{g/kg}$  per day.

30. (Original) The method of claim 28, wherein the therapeutically effective dose is injected.

31. (Original) The method of claim 30, wherein the therapeutically effective dose is injected subcutaneously.

32. (Original) The method of claim 30, wherein the therapeutically effective dose is injected intravenously.

33. (Original) The method of claim 28, wherein the therapeutically effective dose stimulates the patient's own somatic stem cells.

34. (Original) The method of claim 33, wherein the stimulated somatic stem cells are adult stem cells.

35. (Original) The method of claim 33, wherein the stimulated somatic stem cells are hematopoietic stem cells.

36. (Original) The method of claim 33, wherein the stimulated somatic stem cells are adult hematopoietic stem cells.

37. (Original) The method of claim 33, wherein the stimulated somatic stem cells are cardiac stem cells.

38. (Original) The method of claim 33, wherein the stimulated somatic stem cells are adult cardiac stem cells.

39. (Original) The method of claim 33, wherein the stimulated somatic stem cells are cardiac stem cells and stem cells of another type of stem cell other than cardiac stem cells.

40. (Original) The method of claim 33, wherein the stimulated somatic stem cells are adult cardiac stem cells and stem cells of another type of stem cell other than adult cardiac stem cells.
41. (Original) The method of claim 33, wherein the stimulated somatic stem cells are cardiac and hematopoietic stem cells.
42. (Original) The method of claim 33, wherein the stimulated somatic stem cells are adult cardiac and adult hematopoietic stem cells.
43. (Original) The method of claim 33, wherein the stimulated somatic stem cells become mobilized.
44. (Original) The method of claim 43, wherein the mobilized somatic stem cells home to the damaged myocardium and/or myocardial cells.
45. (Original) The method of claim 43, wherein the mobilized somatic stem cells migrate into the damaged myocardium and/or myocardial cells.
46. (Previously Amended) The method of claim 44, wherein the somatic stem cells differentiate into one or more of the following types of cells selected from the group consisting of:
- a. myocytes;
  - b. smooth muscle cells; and
  - c. endothelial cells.
47. (Original) The method of claim 46, wherein the differentiated somatic stem cells proliferate.
48. (Original) The method of claim 46 wherein the differentiated somatic stem cells

assemble into myocardium and/or myocardial cells.

49. (Original) The method of claim 46, wherein the differentiated somatic stem cells assemble into a coronary artery.

50. (Original) The method of claim 46, wherein the differentiated somatic stem cells assemble into an arteriole.

51. (Original) The method of claim 46, wherein the differentiated somatic stem cells assemble into a capillary.

52. (Original) The method of claim 46, wherein the differentiated somatic stem cells at least partially restore function to the damaged myocardium and/or myocardial cells.

53-123. (Cancelled)

124. (Previously Amended) A method of implanting or depositing cells or causing the implantation or depositing of somatic stem cells in cardiac or blood vessel tissue comprising administration of a cytokine in a patient in need thereof.

125. (Original) The method of claim 124, wherein the cytokine comprises a cytokine selected from the group consisting of:

- a. a stem cell factor;
- b. a granulocyte-colony stimulating factor;
- c. a stromal cell-derived factor-1;
- d. an interleukin-3;
- e. a granulocyte-macrophage colony stimulating factor;
- f. a macrophage colony stimulating factor;
- g. a steel factor;
- h. a vascular endothelial growth factor;

and combinations thereof.

126. (Original) The method of claim 124, wherein a therapeutically effective dose of a cytokine is administered.
127. (Original) The method of claim 126, wherein the therapeutically effective dose of the cytokine is 50-500  $\mu\text{g/kg}$  per day.
128. (Original) The method of claim 126, wherein the therapeutically effective dose stimulates the patient's own somatic stem cells.
129. (Original) The method of claim 128, wherein the stimulated somatic stem cells are adult stem cells.
130. (Original) The method of claim 128, wherein the stimulated somatic stem cells are hematopoietic stem cells.
131. (Original) The method of claim 128, wherein the stimulated somatic stem cells are adult hematopoietic stem cells.
132. (Original) The method of claim 128, wherein the stimulated somatic stem cells are cardiac stem cells.
133. (Original) The method of claim 128, wherein the stimulated somatic stem cells are adult cardiac stem cells.
134. (Original) The method of claim 128, wherein the stimulated somatic stem cells are cardiac stem cells and stem cells of another type of stem cell other than cardiac stem cells.
135. (Original) The method of claim 128, wherein the stimulated somatic stem cells are adult cardiac stem cells and stem cells of another type of stem cell other than adult cardiac stem cells.

136. (Original) The method of claim 128, wherein the stimulated somatic stem cells are cardiac and hematopoietic stem cells.

137. (Original) The method of claim 128, wherein the stimulated somatic stem cells are adult cardiac and adult hematopoietic stem cells.

138. (Original) The method of claim 128, wherein the stimulated somatic stem cells become mobilized.

139. (Original) The method of claim 138, wherein the mobilized somatic stem cells home to the damaged myocardium and/or myocardial cells.

140. (Original) The method of claim 138, wherein the mobilized somatic stem cells migrate into the damaged myocardium and/or myocardial cells.

141-153. (Cancelled)

154. (New) The method of claim 29, wherein the therapeutically effective dose of the cytokine is 100-500  $\mu\text{g/kg}$  per day.

155. (New) The method of claim 127, wherein the therapeutically effective dose of the cytokine is 100-500  $\mu\text{g/kg}$  per day.